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www.bigstoneii.com

March 18, 2008

Mr. Kyrik Rombough
South Dakota Department of
Environment and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

MAR 2 0 2008

AIR QUALITY PROGRAM

Dear Mr. Rombough:

Subject: Clean Air Act § 112(g) Case-by-Case MACT

Big Stone II

Otter Tail Power Company is withdrawing the Big Stone II Case-by-Case MACT for mercury submitted on February 25, 2008. After further analysis, we determined that Big Stone II will not be a major source of hazardous air pollutants (HAPs) and thus not subject to Clean Air Act § 112(g) requirements. As shown on the attached table, no single HAP emissions will exceed 10 tons per year and combined emissions will be less than 25 tons per year.

To ensure that HAP emissions from Big Stone II are minor, Otter Tail proposes emission limits of 9.5 tons per year and 2.17 pounds per hour for two HAPs, hydrofluoric acid (HF) and hydrochloric acid (HCl). These are the HAPs that approach the major source threshold of 10 tons per year and contribute the most to the total HAP emissions. Compliance with these limits will ensure that Big Stone II is not a major source of HAPs. Otter Tail has confirmed that it can measure both HF and total fluorides in order to demonstrate compliance with an HF MACT limit and the fluoride BACT limit, which is in the draft PSD permit for Big Stone II.

This withdrawal of the February 25, 2008 Case-by-Case MACT is not intended to affect the mercury or fluoride provisions in the draft PSD permit for Big Stone II.

Should you have any questions regarding our determination that Big Stone II is not subject to the Clean Air Act § 112(g) requirements, please contact me.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for

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gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely

Terry Graumann

Manager, Environmental Services

Enclosure

HAZARDOUS AIR POLLUTANT EMISSION ESTIMATES - BSP II POTENTIAL TO EMIT

Big Stone II Heat Input (MMBtu/hr)	6,000
Particulate emission rate (lb/MMBtu)	0.012
Btu/lb (wet)	8495
% Moisture in coal	29.68%
tons per year (dry)	2,175,409
tons per year (wet)	3,093,584
MMBtu per year	52,560,000
Ash Fraction (dry basis)	7.12%

Maximum (tpy)	9.48	<10 tpy
Total (tpy)	22.18	<25 tov

PRI LARK			Air Fact	ors	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
CAS#	Chemical Substance	Average			11 mm. +	Control	Emissions	Emissio
N010	Antimony	(ppmwd) 0.24	A 0.92	B 0.63	lb/TBtu*	Efficiency	lb/year	tpy
N020	Arsenic	4.3	3.1	0.85	0.12 2.36		124	0
N050	Beryllium	0.27	1.2	1.1	0.04		124	0
N078	Cadmium	0.29	3.3	0.5	0.73		38	0
N090	Chromium	5.5	3.7	0.58	3.54		186	****
N096	Cobalt	1.6	1.7	0.58	0,69		36	0
N420	Lead	4.8	3.4	0.09	2.87		151	
N450	Manganese	33	3.8	0.6	10.64		559	C
N495	Nickel	3.7	4.4	0.48	3.51		184	
mission Factor	(lb/TBtu) = (A)*(ppmwd * PM lb/MMBtu / As			0.70	5.51		104	<u>`</u>
RI LARK		, (2)						
		Average		г –		Control	Emissions	Emissi
CAS#	Chemical Substance	(ppmwd)	lb/TBtu		Uncontrolled tpy	Efficiency	lb/year	Emissi tpy
N458	Mercury Compound	0.069	5.71	\vdash	0.15	74%	78	• ••
7647010	Hydrochloric acid	111.00	9,449.61	 	248.34	96.2%	18,874	- '
7664393	Hydrogen fluoride (Hydrofluoric acid)	60.00	5,230.31		137.45	93.1%	18,968	
N725	Selenium	2.10	173.83		4.57	90%	914	
RI LARK							717	
A				İ		Control	Emissions	Emissi
CAS#	Chemical Substance	1			lb/TBtu	Efficiency	lb/year	tpy
75070	Acetaldehyde			—	3.2		168	ıpy (
98862	Acetophenone			\vdash	1.2		63	
107028	Acrolein				1.9		100	- (
107051	Allyl Chloride				9.1		478	
71432	Benzene				3.9		205	
100447	Benzyl chloride				0.28		15	
92524	Biphenyl				0.16	··	8	- 0
74839	Bromomethane				0.89		47	
75150	Carbon Disulfide				1.1		58	- 6
108907	Chlorobenzene				0.16		8	0
75003	Chlorethane				0.53		28	Ö
67663	Chlorofonn				0.8		42	0
74873	Chloromethane				1.1		58	0
1319773	Cresol				1.1		58	0
106445	p-Cresol				1.1		58	0
132649	Dibenzofuran				0.58		30	0
106934	1,2-Dibromoethane				2.6		137	0
84742	Dibutyl phthalate				0.11	~~	6	0
75092	Dichloromethane				2.7		142	0
117817	Di (2-ethylhexyl) phthalate				3.6		189	0
131113	Dimethyl phthalate				0.09		5	0
121142	2,4-Dinitrotoluene				0.2		11	0
100414	Ethyl benzene				0.8	*****	42	0
107062	Ethylidene dichloride				0.89		47	0
50000	Formaldehyde				2.6		137	- 0
110543	Hexane				0.49		26	0
78591	Isophorone				1.2		63	- 0
74884	Methyl iodide				2		105	Č
108101	Methyl isobuytl ketone				2.3		121	0
80626	Methyl methacrylate				1.1		58	0
91203	Naphthalene				0.62		33	0
108952	Phenol				3.3		173	C
POM	POM				2.072		109	0
123386	Propionaldehyde				1.9		100	0
100425	Styrene				0.7		37	C
127184	Tetrachloroethylene				0.42		22	C
108883	Toluene				1.7		89	0
120821	1,2,4-Trichlorobenzene				1.5		79	C
71556	1,1,1-Trichloroethane				0.61		32	0
108054	Vinyl acetate				0.31		16	0
75014	Vinyl chloride				0.73		38	0
1330207	Xylene				1.26		66	0
1746016	2,3,7,8-Tetrachlorodibenzo-dioxin		7		3.90E-07		0	0
42		,						
CAS#	Chemical Substance				Γ	Control	Emissions	Emissi
					lb/ton	Efficiency	lb/year	tpy
532274	2-Chloroacetophenone				7.00E-06		22	0
75252	Bromoform		I		3.90E-05		121	0
98828	Cumene				5.30E-06		16	Ö
77781	Dimethyl sulfate				4.80E-05		148	0
60344	Methyl hydrazine				1.70E-04		526	Ö
1634044	Methyl tert butyl ether				3.50E-05			0